

**ABSTRACT**

5 An integrated x-ray and ultrasound medical imaging system is provided, wherein a radiation detection means and ultrasound transducer may be disposed for scanning movement for image acquisition along either the same or substantially coincidental paths. The radiation detection means and ultrasound transducer may be advantageously located on the same side of the imaged body portion. The x-ray and ultrasound imaging operations may be sequential, partially overlapping, or synchronous. By virtue of the noted arrangement, increased accuracy and medical efficiencies can be realized.